

REMARKS

The Examiner's action mailed January 27, 2004 has been given careful consideration by the applicant. Claims 1-34 remain in the application. Reexamination and reconsideration of the application is hereby respectfully requested.

The Office Action

The Examiner rejected claims 1-4, 11, 12, 18-21, 28 and 29 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,188,079 to Juvinal et al.

Claims 5-10, 13-17, 22-27 and 30-34 were rejected under 35 U.S.C. §103 as being unpatentable over the Juvinal patent in view of U.S. Patent No. 3,721,501 to Atkinson, et al.

The Cited Patents

The Juvinal patent relates to a method and apparatus of measuring wall thickness of a hollow glass article. The technique includes the steps of measuring intensity of radiation emitted by the article at a first wavelength at which intensity varies as a function of both temperature at the surfaces and wall thicknesses between the surfaces and at a second wavelength at which intensity varies as a function of temperature at the surface of substantially independent of wall thickness between the surfaces. Since the first intensity measurement is a function of both wall thickness and temperature, while the second intensity measurement is a function of solely surface temperature, wall thickness between the surfaces can be determined as a combined function of the first and second intensity measurements.

Notably, the technology of Juvinal requires a hot glass container in order to be implemented because the radiation source is the radiant heat energy emitted from the hot glass. This technique relies on the concept of factoring out heat

measurements to reduce the number of variables from two (heat and wall thickness) to one (wall thickness). Of course, to accomplish this task, Juvinal must utilize two different wavelengths in the process.

It is submitted that the Juvinal patent does not fairly teach the use of a radiation source that is separate and apart from the objects under inspection. In this regard, it is submitted that Juvinal teaches away from this concept inasmuch as the glass bottles being inspected emit heat. Because the glass bottle of Juvinal is the radiation source, Juvinal also fails to fairly teach a configuration wherein the objects under inspection are between the source and a sensor device.

Moreover, the Juvinal patent does not use the concept of opaqueness to directly determine any structural property of the container. As best understood, opaqueness is merely used to determine the temperature of a wall that is nearest the sensor.

The Atkinson patent relates to a method and apparatus for monitoring surfacing coatings. Atkinson is cited for its purported teaching of a mechanical chopper for a bottle inspection system.

The Claims Patentably Distinguish Over The Cited Patents

The Examiner rejected claims 1-4, 11, 12, 18-21, 28 and 29 as being anticipated by the Juvinal patent. However, as noted above, the Juvinal patent does not disclose nor fairly teach the use of an electromagnetic radiation source, separate from the objects under inspection, which transmits wavelengths wherein the visibly clear objects being inspected are rendered opaque by naturally occurring molecular and/or atomic absorptions occurring within the material of the object being inspected. In addition, Juvinal does not disclose a support structure positioned to maintain the objects (under inspection) between the radiation source and the sensor

device -- because it does not distinguish between the radiation source and the objects under inspection.

These features, however, are recited in independent claim 1. Therefore, this claim, and all claims dependent thereon, are not anticipated by the Juvinal patent.

In addition, Juvinal does not fairly disclose placing a visibly clear object under test between a sensor device and a source of electromagnetic radiation. In Juvinal, as noted above, the object under inspection is the source of radiation. Therefore, the configuration claimed and the steps recited in independent claim 18 are not anticipated by the Juvinal patent. Therefore, independent claim 18 and all claims dependent thereon, are patentable.

The Examiner also rejected claims 5-10, 13-17, 22-27 and 30-34 as being unpatentable over the combination of the Juvinal patent and the Atkinson patent. However, these claims are all dependant upon independent claims that have been asserted to be allowable. Therefore, these claims are likewise submitted to be allowable over the cited combination.

CONCLUSION

In view of the foregoing, the applicant respectfully submits that the present application is in condition for allowance. Early notification of such allowance is hereby respectfully requested.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

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Date

Joseph D. Dreher
Joseph D. Dreher
Reg. No. 37,123
1100 Superior Avenue
7th Floor
Cleveland, Ohio 44114-2579
(216) 861-5582